

Exhibit

12. A heat sink apparatus comprising:

a heat sink apparatus substrate 2, 12 for being attached to a beat emitting element 1, 11, and having a bottom portion with a standing wall 3, 13 mounted thereon;

a driving device 6, 16 supported by said substrate;

an axial fan 7, 17 mounted on said driving device;

a plurality of fins 5, 15 provided in said housing, said fins being provided substantially in parallel to an air flow direction at an end portion of said standing wall; and

a cover 8, 18 mounted on said standing wall, wherein said driving device protrudes through an opening formed on said cover 8, 18 and a height of an upper surface of said fan 7, 17 and a height of an upper surface of said cover 8, 18 are lower than that of an upper surface of said driving device 6, 16 relative to said bottom wall.

13. A heat sink apparatus comprising:

a heat sink apparatus substrate 2, 12 for being attached to a beat emitting element 1, 11, and having a bottom portion with a standing wall 3, 13 mounted thereon, said standing wall defining an air outlet,

a driving device 6, 16 supported by said substrate;

an axial fan 7, 17 mounted on said driving device;  
a plurality of fins 5, 15 provided in said housing 2, 12,  
said fins being provided substantially in parallel to said  
standing wall at said air outlet; and  
a cover 8, 18 mounted on said standing wall, wherein said  
driving device 6, 16 protrudes through an opening formed on said  
cover and a height of an upper surface of said fan 7, 17 and a  
height of an upper surface of said cover 8, 18 are lower than  
that of an upper surface of said driving device 6, 16 relative to  
said bottom wall.